

What is claimed is:

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1           1.       A fixation device at least partially implantable into tissue, comprising:  
2               a shaft having an outer face;  
3               a threaded portion wound around the outer face and forming a helical groove, at  
4       least a part of the threaded portion being implantable into tissue, the threaded portion  
5       comprising:  
6               a first face having:  
7                       a first end portion in curved contact with the outer face;  
8                       a second end portion opposite the first end portion;  
9               a second face having:  
10                       a third end portion in curved contact with the outer face;  
11                       a fourth end portion opposite the third end portion;  
12               a third face, the third face being coupled to the second end portion and the  
13       fourth end portion and being substantially parallel with the outer face.

1           2.       The fixation device according to Claim 1, wherein third face is in curved  
2       contact with at least one of the second end portion and the fourth end portion.

1           3.       The fixation device according to Claim 1, wherein the third face contacts  
2       the second end portion at a first point, and the third face contacts the fourth end portion at  
3       a second point.

1           4.       The fixation device according to Claim 1, wherein an angle formed by the  
2 plane of the outer face and the plane of the second face is between substantially 85  
3 degrees and substantially 125 degrees.

1           5.       The fixation device according to Claim 1, wherein an angle formed by the  
2 plane of the outer face and the plane of the first face is between substantially 95 degrees  
3 and substantially 140 degrees.

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1           6.       The fixation device according to Claim 1, wherein a distance between the  
2 plane of the outer face and the plane of the substantially parallel third face is between  
3 substantially 0.25 millimeters and substantially 3 millimeters.

1           7.       The fixation device according to Claim 1, wherein a region forming the  
2 curved contact between the first end portion and the outer face has a radius of at least  
3 approximately 0.15.

1           8.       The fixation device according to Claim 1, wherein a region forming the  
2 curved contact between the second end portion and the outer face has a radius of at least  
3 approximately 0.08.

1           9.     The fixation device according to Claim 1, wherein the shaft and threaded  
2     portion form a dental implant, and wherein a distance between the first face, at a region  
3     forming the curved contact between the first end portion and the outer face, and the  
4     second face, at a region forming the curved contact between the third end portion and the  
5     outer face, is between approximately 0.20 millimeters and 2.00 millimeters.

1           10.    The fixation device according to Claim 1, wherein the shaft and threaded  
2     portion form an orthopedic implant, and wherein a distance between the first face, at a  
3     region forming the curved contact between the first end portion and the outer face, and  
4     the second face, at a region forming the curved contact between the third end portion and  
5     the outer face, is between approximately 0.20 millimeters and 6.00 millimeters.

1           11.    The fixation device according to Claim 1, wherein the shaft and threaded  
2     portion form a dental implant, and wherein a distance between the third face and the outer  
3     face is between approximately 0.25 millimeters and 3.00 millimeters.

1           12.    The fixation device according to Claim 1, wherein the shaft and threaded  
2     portion form an orthopedic implant, and wherein a distance between the third face and  
3     the outer face is at least approximately 0.25 millimeters.

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1           13.    The fixation device according to Claim 1, wherein the shaft and threaded  
2   portion form a dental implant, and wherein a distance between the second end portion and the  
3   fourth end portion on an adjacent thread is between approximately 0.30 millimeters and 3.00  
4   millimeters.

1           14.    The fixation device according to Claim 1, wherein the shaft and threaded  
2   portion form an orthopedic implant, and wherein a distance between the second end portion  
3   and the fourth end portion on an adjacent thread is between approximately 0.30 millimeters  
4   and 8.00 millimeters.

1           15.    The fixation device according to Claim 1, wherein the shaft and threaded  
2   portion form a dental implant, and wherein a length of the third face is between  
3   approximately 0.25 millimeters and 3.00 millimeters.

1           16.    The fixation device according to Claim 1, wherein the shaft and threaded  
2   portion form an orthopedic implant, and wherein a length of the third face is between  
3   approximately 0.25 millimeters and 6.00 millimeters.

1           17.    The fixation device according to Claim 1, wherein the threaded portion has at  
2   least one transverse slot along at least a portion thereof.

1 18. A dental implant at least partially implantable into oral tissue, comprising:  
2 a shaft having an outer face;  
3 a threaded portion wound around the outer face and forming a helical groove, at least  
4 a part of the threaded portion being implantable into the oral tissue, the threaded portion  
5 comprising:  
6 a first face having:  
7 a first end portion in curved contact with the outer face;  
8 a second end portion opposite the first end portion;  
9 a second face having:  
10 a third end portion in curved contact with the outer face;  
11 a fourth end portion opposite the third end portion;  
12 a third face, the third face being coupled to the second end portion and the  
13 fourth end portion and being substantially parallel with the outer face.

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1 19. A fixation device at least partially implantable into tissue, comprising:

2 a shaft having an outer face;

3 a plurality of fin sections disposed along at least a portion of the length of the other  
4 face, each of the fin sections being coaxial with the shaft and having a diameter greater than  
5 the diameter of the outer face at the disposed location, each of the fin sections comprising:

6 a first face having:

7 a first end portion in curved contact with the outer face;

8 a second end portion opposite the first end portion;

9 a second face having:

10 a third end portion in curved contact with the outer face;

11 a fourth end portion opposite the third end portion;

12 a third face, the third face being coupled to the second end portion and the  
13 fourth end portion and being substantially parallel with the outer face.

1 20. The implant device according to Claim 19, wherein the shaft and the plurality  
2 of fin sections form a dental implant.